



The MIAMI EXPRESS FAA/ SAFETY NEWSLETTER

April/May/June, 2003
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Safety Program

Our mission is to enhance safety awareness within the local aviation community and industry through open positive communications and an effective, realistic training program.

Our Goal is to create an atmosphere, which fosters a friendly customer service interaction.

Address & Phone

The Miami FSDO-19 address is:
DOT/FAA/FSDO-19/SPM Office
8600 NW 36th St. Suite 201
Miami, FL 33166
Michael C. Thomas, Manager
Phone # 305-716 -3400
Rene Alvarez, SPM Ext. 198
Walter A. Wilson, SPM Ext. 219
FAX # 305-716-3437

Internet Home Page address is:

<http://www.faa.gov/fsdo/mia>

Wings & AMT Awards

We have updated our awards process, which has increased our output efficiency and decreased the time frame for issuance of awards.

However, without your participation and timely submission of awards applications we cannot recognize you and your employees accomplishments.

Remember to review AC 61-91 & AC 65-25B and include all required supportive documentation when submitting an award application.

If you are interested in having a FAR seminar conducted at your facility, contact:
Rene At 305-716-3400 Ext. 198 or
Walter A. Wilson, Ext. 219



Wings Awards

Phase I

Jorge Luis Artiga
Danise Michael
Gabriel Ruz
Annette Thompson
Mathias Aur
Francis A. Taype
John Mathew Lowe
Gustavo Alfonso Pinzon
Gustavo Rodriguez
Nelson Orta
Louis R. Bragassa
Anthony Rios
Juan A. Espinal
Sebastian Manzo
Desiree Bodie
Grayson J. Clarke
Fernando Rico
Francisco Navarrette
Gaston Rossato
Armando J. Hurtado
Luis Gomez
Nicholas Murrell
Jorge M. Madrid
Aldo D. Bustos
Adrian Castera
Diego Ramirez
Alex D. Farkas
Carlos E. Perez
Guillermo Cabeza
George M. Porta
Bryon Nesbit t
Allen J. Thompson

Phase II

R. Daniel Zieg
Fernando Rico





Wings Awards

Phase II

Maria Muldez
Steve A. Jones
Albert Ohilion
Fulco M-Y Vitteras
Sebe R. Van Amerongen
Nancy Zieg

Phase III

George Carrazana
Paul Clemente
Howard L. Grossman

Phase IV

David James Cooper

Phase VII

Susan D. Moore

Phase XIV

Perry Lee

CERTIFICATE OF ATTENDANCE

Special Recognition

for All Pilots

Why Participate?

Regular proficiency training is essential to the safety of all pilots and their passengers. The objective of the "*Pilot Attendance Award Program*" is to encourage pilots to establish and participate in a continuous Personal Recurrent Training Program.

Who May Participate?

All pilots holding an Recreational Pilot Certificate or higher. In addition, uncertified pilots of qualified ultralight vehicles under FAR Part 103 may participate in the Attendance Program.

How Does the Program Work?

The Program consist of three certificates. For the *Silver* Certificate you must attend at least four (4) Aviation Safety Seminars per year, for the *Gold* Certificate you must attend at least eight (8) Aviation Safety Seminars per year, and for the *Diamond* Certificate you must attend at least ten, (10) Aviation Safety Seminars per year. ***For any of the three certificates you must be currently active in the Wings Program.***

The program is design to work during the fiscal year, example; beginning October 1, 2001 and ending September 30, 2002. Either the Safety Program Manager or the Aviation Safety Counselors for each of the monthly seminars attended must sign the *Certificate of Attendance*.

At the end of the fiscal year (**September 30**) the Certificate of Attendance are submitted to the address below for processing. After 30 days the Aviation Safety Program Managers will issue the appropriate Certificate of Recognition.

Better Landings

Pride plays an important part of being a pilot and every pilot should approach every flight with care, professionalism, and preparation. The biggest amount of pride we receive comes from the people we safely transport; and the thing most passengers remember is the landing. Passengers are basically Olympic gymnastic judges; you can have a lawless routine and still have many, many points deducted for a so-so landing. If you want landings that are "Perfect 10s" while you give your newfound admirers a big aviator smile, a wink, and a "I can do this blindfolded" humble attitude; look no further, here are some tips that will take your landings to the next level.

The first thing you must always remember is that "practice makes perfect". No matter how good you are, prepare to be rusty if you have not flown in 3-4 weeks. But you can assure yourself near perfect landings every time with the following procedures I have picked up from years of experience in training and teaching.

The golden rule of landings, which I firmly stand by, is that "a good landing begins with a good approach". Perfect landings truly begin in the downwind leg and your goal should be to establish a pattern that can be carried-over to every airport you visit. "You may be an ACE in Tamiami's (TBM) endless pavement and land-marked pattern, but try your hand at Everglades City (X01) airport and you will find yourself humbled."

You will need to "practice using your eyes to accurately judge distance and altitude", this is a skill you must attain and is not one which you are born with.

Try guessing you're your altitude and distance without looking at your altimeter or GPS. Make power reductions and flap settings standards for each leg of the pattern. Make every approach standards by using the same power reductions and flap settings at specific positions like abeam the numbers, on base, and on final. The main idea is to develop a standard traffic pattern even if you have never been there before.

Your base leg is the most understanding part of the approach. Learn to keep your patterns square, using proper wind correction, so that you actually have a base leg long enough to judge your height from the runway.

Cont. page 5

Special Recognition for All Pilots

What's In It for Me?

Statistics show that pilots who participate in recurrent training programs have a much better safety record when compared to those pilots who don't. This program provides a pilot with an opportunity to demonstrate and improve their flight proficiency and knowledge by attending safety seminars.

How Do I Participate?

You may participate by attending the Aviation Safety Seminar given by the FAA Aviation Safety Program Managers or any of the Counselors and currently be active in the Wings Program.

Note: This Special Pilot Recognition Awards Program **is only** being offered in the Miami area by the Miami FSDO-19 Safety Program. Miami, FL 33166

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Send Completed

Application to:

FEDERAL AVIATION

ADMINISTRATION

Miami Flight Standards

District Office-19

8600 NW 36th Street, Suite 201

Miami, FL 33166

ATTN: Rene Alvarez, SPM

Test Your Aviation Knowledge

1] To act as pilot in command of an aircraft carrying passengers, a pilot must show by logbook endorsement the satisfactory completion of a flight review or completion of a pilot proficiency check within the preceding

- A. 24 calendar months
- B. 12 calendar months
- C. 6 calendar months

2] If recency of experience requirements for night flight are not met and official sunset is 18:30, the latest time passengers may be carried is

- A. 18:29
- B. 19:29
- C. 18:59

3] If a recreational or private pilot had a flight review on August 8, this year, when is the next flight review required?

- A. August 8, next year.
- B. August 31, 2 years later>
- C. August 31, 1 year later.

4] When taxiing with strong quartering tailwings, which aileron positions should be used?

- A. Ailerons neutral.
- B. Aileron down on the downwind side>
- C. Aileron down on the side from which the wind is blowing.

To act as pilot in command of an aircraft carrying passengers, the pilot must have made three takeoffs and three landings within the preceding 90 days in an aircraft of the same

- A. make and model.
- B. Category, class, and type, if a type rating is required.
- C. Category and class but not type.

6] Which aileron positions should a pilot generally use when taxiing in strong quartering headwings?

- A. Aileron neutral.
- B. Aileron down on that side from which the wind is blowing.
- C. Aileron up on the side from which the wind is blowing.

**Miami Flight Standards
District Office
Would Like to
Congratulate
Carol Collins
From
Marathon, Florida
Our
Flight Instructor
of the Year!**

See page 4 for answers.



Upcoming Seminars

APRIL

April 3, 2003

7:00pm - 9:00pm
Location: Miami FSDO-19,
8600 NW 36th Street,
3rd Floor Conference Room
Topic: 767 Electrical
Speaker: Jimmy Torres
Sponsor: American Airlines

April 8, 2003

7:00pm - 9:00pm
Location: Naples Municipal
Airport, Pilots Lounge
Topic: Non Airline Security &
Signage
Speaker: Lisa LeBlanc-Hutchings/
Gene Schmidt
Sponsor: Naples Port Authority

April 9, 2003

7:00pm - 9:00pm
Location: Miami FSDO-19,
8600 NW 36th Street,
3rd Floor Conference Room
Topic: FSS Additional Radio &
Weather Service
Speaker: Tom Hofbauer
Sponsor: FAA

April 30, 2003

7:00pm - 9:00pm
Location: Marathon Airport,
9400 Overseas Hwy.,
Departure Lounge
Topic: FSS DVFR / ATIS & ICAO
Speaker: Tom Hofbauer
Sponsor: Marathon EAA Chapter



MAY

May 14, 2003

7:00pm - 9:00pm
Location: Miami FSDO-19,
8600 NW 36th Street,
3rd Floor Conference Room
Topic: CFI Workshop
Speakers: Jim Downing / John
Deiters
Sponsor: ADF Airways Flight
School

May 20, 2003

7:00pm - 9:00pm
Location: Miami FSDO-19,
8600 NW 36th Street,
3rd Floor Conference Room
Topic: Hand Tools Safety
Speaker: Doug Richardson
Sponsor: Armstrong Tools

May 28, 2003

7:00pm - 9:00pm
Location: Lorenzo Walkers Insti-
tute of Technology
3702 Esley Ave.
Naples, FL
Topic: Hand Tools Safety
Speaker: Doug Richardson
Sponsor: Lorenzo Walker Institute
of Safety

JUNE

11 June 2003

7:00pm - 9:00pm
Location: Miami FSDO-19,
8600 NW 36th Street,
3rd Floor Conference Room
Topic: Flying & Diving Safety
Speaker: Fred Furgang, M.D.
Sponsor: FAA

17 June 2003

7:00pm - 9:00pm
Location: Miami FSDO-19,
8600 NW 36th Street,
3rd Floor Conference Room
Topic: Hand Tools
Speaker: Doug Richardson
Sponsor: Armstrong Tools

ANSWERS

Aviation Knowledge Test

1. **A. FAR 61.56**
2. **B. FAR 61.57**
3. **B. FAR 61.57**
4. **B. FAR 61.56**
5. **C.**
6. **C.**



Better Landings

In the base leg you will determine if your standard pattern will work or if any refinement is flap settings to correct for high or low approaches respectively.

Power changes should be no more than 200 RPM, the smaller and the earlier a power correction is made the better. That goes for pitch, yaw, and bank as well. My saying is "Precision yields Perfection". Your final approach should be established in a way that no further control inputs are needed. Basically the airplane should glide itself into the runway. Perfect landings come from precision and finesse. Regardless of wind and turbulence you must learn to making those big control movements so beloved by student pilots. Also using positive, static and dynamic, stability and if you fail to account for those aerodynamic forces you will enter into Pilot Induced Oscillations. Basically you will "snake" or "hammock" yourself down to the runway. You should be able to fly the approach with your fingertips using sound trimming techniques and by keeping your aiming point always in sight and the landing should be effortless.

A bad flare begets a bad landing. Master flaring and you will master landings.. Become a master by practicing flying the ground effect with 10 knots or less of headwind and no crosswind. Fly the length of the runway in ground effect and as close to the runway as possible. Start by flying at twenty feet off the ground and once you master that fly lower and lower until you can hold the aircraft inches from the ground without touching the pavement. This practice will increase your visual acuity, your peripheral vision, and your feel for flaring by learning to identify descent rates and never practiced this before and to leave the runway with sufficient time to climb. Perform this at airports with no obstacles and always visually check that the flaps retract. Use different flap settings and make sure to advice the Tower or Unicom of your intentions. Remember this maneuver is about precision and safety, **DO NOT RUSH IT!**

The touchdown here is just as important as in a football game. Your vision should be focused on the end of the runway while using your peripheral vision to judge height above touchdown.

Touch the main wheels first and take your time in lowering the nose wheel. "Think Space-Shuttle landings". Don't waste a perfect approach by slamming down the nose or braking unevenly.

And that's all there is to it. With a little practice your landings will leave your passengers wondering "Are we on the ground yet?" And don't be surprised to find yourself being asked by other pilots for advice on landings. Take in your skill and Fly Safe!

Carlos Florez
Safety Officer/Flight Instructor
ADF Airways

Repair Stations

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; delay of effective date.

SUMMARY: FAA is delaying the effective date of a final rule that amends the regulations for aeronautical repair stations. This action is necessary to give repair station certificate holders more time to develop required manuals using FAA guidance material, which has yet to be issued, before submitting the manuals to FAA for acceptance. Also this action will allow repair station certificate holders to follow FAA guidance material for requesting FAA approval of contract maintenance functions.

DATES: The effective date of the final rule amending 14 CFR parts 91, 121, 135, and 145 published on August 6, 2001, at 66 FR 41088 is delayed until October 6, 2003, with the following exception: Sec. 145.163 is delayed until October 6, 2005.

FOR FURTHER INFORMATION CONTACT:

Diana Frohn, Flight Standards Service, Aircraft Maintenance Division, General Aviation and Repair Station Branch, AFS-340, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-7027; e-mail: diana.frohn@faa.gov.

Leaky Boat



Bill O'Brien

The rule states that you have to have a training manual submitted by April 6, 2005.

The new Part 145 manual requirements

You missed a meeting, and later found out that your boss assigned to you in-absentia to write the required new Part 145 manual for your repair station. You don't have the foggiest notion of how to do it, nor does anyone else in the repair station including your boss. This lack of skill in manual writing is understandable because the current repair station manual was written back in the late '60s.

You are more than a little scared. You know that if you don't meet the manual deadline, the repair station cannot operate. You see yourself, all alone, sitting in a very small leaky boat, in a big ocean, and it looks like rain. Well my friend, don't feel alone, you have plenty of company. I am quite sure there are at least 5,000 other guys in Part 145 repair stations sitting in similar leaky boats and desperately looking for a bucket.

Through this article I will climb into the leaky boat with you and hand you a bucket. My bucket is basically a series of recommendations on how to research, organize, then write your repair station manuals.

SUPPLEMENTARY INFORMATION:

The Final Rule

On July 30, 2001, FAA issued Repair Stations; Final Rule with Request for Comments and Direct Final Rule with Request for Comments (66 FR 41088; August 6, 2001). That final rule, which becomes effective April 6, 2003, updates and revises part 145 of title 14, Code of Federal Regulations, which prescribes the regulations for aeronautical repair stations. In that rulemaking action, FAA established a new requirement that each repair station must maintain and use a current repair station manual and a quality control manual. FAA also prescribed the contents of these manuals.

In the preamble to the final rule FAA stated, "This final rule will become effective 20 months after it is published in the Federal Register. This time period is needed to develop advisory circulars and internal FAA guidance, and to train FAA personnel. Additionally, repair stations will need adequate time to comply with the new requirements." On November 7, 2002, a notice was published in the Federal Register (67 FR 67891) announcing the availability of Proposed Advisory Circular (AC) 145-MAN, Guide for Developing and Evaluating Repair Station and Quality Control Manuals. In response to commenter requests, FAA extended the close of the comment period for AC 145-MAN from November 22, 2002, to February 5, 2003, (67 FR 70291; November 21, 2002).

On October 21, 2002, Mr. Jason Dickstein, Counsel, sent a petition to FAA for the Aircraft Electronics Association, the Aerospace Industries Association, the Aviation Suppliers Association, and the National Air Transportation Association.

The petitioners request that FAA--

1. "Postpone the implementation date of the changes to part 145 that were published at 66 FR 41088-41124 (August 6, 2001) until no earlier than 180 days after the FAA publishes a notice in the Federal

Register of the availability of the advisory circular that describes how to comply with the repair station manual and quality control manual provisions of new sections 145.207 through 145.211."

2. "Publish notice of implementation postponement in the Federal Register."

3. "Publish a transition rule that permits early compliance with the new rule."

The petitioners contend that FAA has not yet published advisory material and guidance explaining how to produce a manual that is acceptable to FAA. Further, the petitioners assert that without advisory material, FAA cannot adequately train its personnel.

FAA has reviewed the petition and agrees with the petitioners that additional time is necessary to allow each repair station to prepare a repair station manual and a quality control manual following the guidance to be provided in AC 145-MAN. Since the guidance has not yet been issued, FAA finds that an extension is in the public interest.

Although the petitioners request that FAA allow for early compliance with the new rule, FAA finds it appropriate to extend the effective date of the entire final rule. FAA has determined that it would not be in the public interest to have both the current rule and the final rule in effect at the same time. Although this would allow some repair stations to comply with the final rule while repair stations operating under the current rule prepare their manuals, FAA finds this administratively complex.

The vast majority of repair station principal inspectors have oversight responsibility for several repair stations of varying complexity. Concurrent oversight and enforcement of two separate rules with different regulatory requirements would cause confusion and adversely impact the standardized application of repair station regulations. Additionally, FAA has determined that this would not be an efficient use of its inspector resources.

Further, the petitioners request an extension of 180 days from Federal Register publication of the notice of availability of a final AC. Since FAA intends to publish a final AC in the near future, the agency finds that an extension of 180 days from the April 6, 2003, effective date of the rule is sufficient.

Finally, the delay in the effective date of the final rule does not impose any new requirements or any additional burden on the regulated public. FAA, therefore, finds there are no additional costs or benefits associated with this action. However, the 180-day extension will delay realization of some cost savings provided by the rule.

Good Cause for Immediate Adoption

In accordance with 5 U.S.C. 553(b)(3) (B), FAA finds good cause for issuing this rule without prior notice and comment. Seeking public comment is impracticable, unnecessary, and contrary to the public interest. This delay of effective date will give repair stations sufficient time to use FAA guidance material in preparing to operate under the amended regulations for repair stations. Given the imminence of the effective date, seeking prior public comments on this temporary delay would have been impracticable, as well as contrary to the public interest in the orderly promulgation and implementation of this rule.

In consideration of the foregoing, FAA is amending parts 91, 121, 135, and 145 to delay the effective date of the final rule by 180 days.

Issued in Washington, DC, on March 4, 2003. Marion C. Blakey, Administrator. [FR Doc. 03-6181 Filed 3-12-03; 8:45 am]



The new Part 145 manual requirements

The bucket also contains a suggested format to follow that should keep you out of trouble. I regret that I cannot give you boiler-plate paragraphs that would answer the requirement for each of the new rules. That's impossible. They don't make a bucket big enough. Very few of the 5,000 plus Part 145 repair stations operate in the same manner, provide the same services, and have similar approaches to running a business. Let's get started, the water is up to my ankles.

Research: At the very least do your home work. You will need to gather and read the following documents and publications.

- a. Your current repair station inspection procedures manual.
- b. List of repair station managers, inspectors, repairman, and their job titles, duties, and responsibilities.
- c. All the forms that you presently use, including Form 337, Form 8130-3, maintenance release, parts identification tags, un-airworthy tags, 8120-11 Suspected Unapproved Parts form, Malfunction and Defect forms, etc.
- d. If your repair station does work for air carriers you need information on drug and alcohol testing. You can find this information on the Drug Abatement Homepage at <http://www2.faa.gov/avr/aam/adap/>.
- e. AC 21-29B (change) 2 Detecting and reporting SUPS.
- f. List of approved and acceptable data, including process specifications if any.
- g. AC 43.13-1B and AC 43.13-2A.
- h. FAA Airworthiness Inspector's Handbook, Order 8300-10. It is located at <http://www2.faa.gov/avr/afs/faq/8300>.
- i. A copy of the new Part 145 rules. You can find this information on <http://www.arsa.org/part145/finalrule.pdf>.
- j. A draft copy of AC Part 145-MAN. You can find this AC at <http://www.opspecs.com/awcirculars/>.
- k. Copy of Part 43, Part 21, and Part 91.
- l. AC 120-78, acceptance and use of electronic signatures, record keeping, and electronic manuals, if applicable.

For a medium size repair station of 20 employees, I estimate that it will take you 40 hours to gather and read all the documentation. In short order, you will find out how the repair station is being run vs. how your current manual says it is being run.

Next, I want you to make a "straw dog." A "straw dog" is a less than perfect manual which is developed by taking the procedures in your existing inspection procedures manual that meet the old Part 145 rules, and marrying that information into the sections of the new rule. This can be done fairly quickly if you look at the Part 145 cross reference table on page 41115 of final Part 145 rule that is printed in the Federal Register of Aug. 6, 2001. When you finish, you will have a good start on your repair station manual and if you are lucky you might have filled in some blanks to your quality control manual. But more importantly you now know what you need to do.

After you become the resident expert on your repair station operation you should get together with management and give them the "straw dog." Next brief them on the differences between the manual and how the repair station is presently doing business. Then ask them since the manual has to be changed anyway, do they want to maintain the status quo, or explore more effective or efficient ways to make a buck. For example, do they want to have a satellite repair station, get another rating, go to electronic signatures and manuals, contract out, or rent equipment to other repair stations? Give them a week to decide. Either way they go, get their response in writing, because that piece of paper is really your marching orders on how they want the manuals written.

Organizing your manuals. To be certified under the new Part 145 you must have the following:

- a. Repair station manual.
- b. Quality control manual.
- c. List by type, make, or model as appropriate, each article you are going to work on.
- d. Organizational chart and the names of managing and supervisory personnel.
- e. Description of the repair station's housing and facilities and its address.
- f. List of maintenance functions you want to contract out. (Note: For a definition of "maintenance functions," refer to AC145-MAN as revised.)
- g. List of maintenance contractors, along with the function they provide, their ratings if certificated.
- h. Training program.

Recommendations: While the above requirements are the mandatory minimum documentation that you have to create, I suggest that you make at least four manuals and three lists. It's really the same requirements so your workload is the same but I think having four separate manuals and three lists would be easier to organize, write, and revise.

The manuals are: repair station manual, quality control manual, forms manual, and training



The new Part 145 manual requirements

The lists are:

- 1: Capabilities list - in lieu of using the operation specifications - for the make and models of articles that you work on;
- 2: List of maintenance functions that you want to contract out and identify those certificated and noncertificated facilities;
3. List/roster of management, supervisors, persons authorized to sign a maintenance release and certificated repairmen.

On the top of each manual page and list print the name of the repair station, date, revision number, page number, and section or rule it is addressing, if applicable. Do not use sequential numbers in your manuals in order to avoid re-formatting all of the manual's page numbers when a revision is made. Also identify each major section (sub-part) in the manual with its own numbering system (a-1, b-1, etc.). Make sure that a cover letter to the FAA accompanies the manuals.

I also suggest that you put together a regulatory control sheet in the general section of the repair station manual that lists the 33 new rules or tells the reader where in the manuals they are addressed. This regulatory control sheet idea is similar to a Letter of Compliance that you had to develop if you got a repair station certificate in the last six years. But use common sense when you put together the control sheet. If you do not work on Air Carrier equipment, still list §145.205, but say it is not applicable and a short reason why. While it will take some time to develop the regulatory control sheet, it will serve as a checklist so you don't miss a rule and will help the FAA inspector review your manual faster.

When describing a process or procedure to comply with a rule make sure you answer the who, what, when, where, why, and how. Also include a description of the forms needed to complete a procedure. Design into each manual a table of contents, list of effective pages, and record of revisions. But, remember, "Many words rarely equals clarity." Edit your manual at least three times before submitting it to the FAA.

Repair station manual

This is really an autobiography of the repair station, it should not be a work of fiction. Refer to AC 145-MAN as revised for additional guidance and suggestions.

For a quicker manual/list acceptance by the local FSDO, I recommend that its format be laid out just like the five sub-parts in the new Part 145 rule. For example: Sub-part A --- General; Sub-part B --- Certification; Sub-part C --- Housing, facilities, equipment, materials, and data; Sub-part D ---- Personnel; and Sub-part E ---- Operating rules.

The new rule that controls what the repair station manual must contain is §145.209. We will go over it in detail, but while this is not a FAA requirement I recommend that before you jump into writing the sub-parts or chapters in your manual that you first provide the reader with an overview of what services the repair station provides, how it is organized, as well as company goals and objectives. Also include the name of the accountable manager, and department supervisors and their telephone and fax numbers. Why? Not only will the repair station manual be mandatory reading for all new and current employees, but it will be read by other organizations who may want to contract out your services. This is a good spot to fluff up your feathers and tell the world just who and what you are.

Sub-part A: General: ref: §145.209 (a)

1. Describe how each manual is revised, identified, distributed, controlled, who is responsible for these actions, and how each revision is controlled and recorded.
2. Make an FAA control page for each manual and list, so the FAA inspector can sign acceptance of the original manual(s) and revisions.
3. Describe procedures and feedback system to ensure that every manual has received and incorporated the latest revisions.
4. Give the number of manuals that will be used, how they are identified, and where they are physically located.
5. List the name of the individual(s) who are responsible to revise these manuals and lists (ref: §145.209(b)).
6. List the maximum amount of time allowed to revise all of the repair stations manuals (ref: §145.209(j)).
7. Describe procedures on how to revise the manual(s) and list(s) and how often the FAA will be notified of these revisions (ref: §145.209(k)).
8. Make a statement that the repair station will not operate or perform any maintenance unless properly certificated. Also point out where the repair station certificate and operation specifications are displayed (ref: §145. 5).
9. List the repair station's ratings (ref: §145.59 or 61 as applicable).



The new Part 145 manual requirements

Sub-part B: Certification:

1. I would include a copy of the certification paperwork (ref: §145.51). This is not required, but might come in handy in the future.
2. Create an organizational chart that: (ref: §145.209(a))
 - a. Identifies each management position who can act for the repair station;
 - b. Includes area of responsibility assigned to each management position;
 - c. Describes duties and responsibilities of each position.
3. Can your brother-in-law understand the chart?
4. Are the titles in the organizational chart consistent with the titles and authority in the rest of the manuals?
5. Does the chart clearly show the separation of maintenance and inspection departments if applicable?
6. Describe how the repair station will address a change to its certificate, either an addition or removal of ratings, or transfer of assets (ref: §145.57).
7. A list, or reference to a list, that identifies by type, make, or model as appropriate of each article to be worked on (ref: §145.51(a)(3)).
8. Location of the quality control manual (§145.51(a)(3)).
9. Location of the training manual (§145.1).
10. Location of a list that identifies work that is contracted out to FAA repair stations or uncertificated persons.
11. A statement that says the repair station certificate must be returned to the FAA if the certificate is surrendered, suspended, or revoked (§145.55).

Sub-part C: Housing facilities, equipment, materials, and data: Ref: §145.101, 103, and 209 (c)

Describe, in paragraph form, an outline of the repair station facilities, its equipment, materials, and data used when the work is being done, and include the following:

1. A scaled drawing of the facilities, listing square footage for each work and segregated areas.
2. Identify all segregated work areas such as painting, battery charging stations, electronic work, parts room, welding, etc.
3. Identify areas where parts are in storage, awaiting maintenance, shipping, or in stock.
4. Identify the ventilation, lighting, temperature, and humidity controls including any special environmental conditions.
5. Identify the number of racks, hoists, trays, stands, benches, hydraulic mules, test equipment, etc.
6. Identify the kind and type of data available and if data is supplied by another party, how that is accomplished and kept current and who is responsible (§145.109(d)).
7. Identify how life-limited parts/stock items will be controlled and who is responsible.
8. Describe the stock/tool room operations, ordering of parts, the calibration of the special tools. How they are accomplished, tracked, and who is responsible (§145.109(b)).
9. If the repair station leases or rents equipment or tools, how is that handled, who is responsible, and how are items transferred.
10. If the repair station makes its own special tools, identify the procedures or data for determining that those tools are equal to the manufacturer's. Who makes that decision? (ref: §43.13 and §145.109(c)).
11. If the repair station has an airframe rating, it must make a statement that the facilities are big enough to fully enclose the largest make and model aircraft that is listed on its operating specifications (ref: §145.103(b)).
12. If work will be accomplished outside of its facilities, the repair station must list procedures, equipment, and facilities acceptable to the FAA (ref: §145.103(c)).
13. Describe how the repair station will operate if the repair station is changing its facilities, location, or housing (ref: §145.105).

Sub-part D: Personnel: (ref: §145.151)

First you have to identify the "accountable manager." This is the individual who holds the wet paper bag of responsibility and he or she must have the authority to make changes in the repair station operation as well as the responsibility for its operation. The accountable manager is also the FAA's point of contact. So pick a good one (ref: §145.151(a)).

Next, list the chain of management and supervisory command and who reports to whom. Who is responsible for what part of the repair station, and who settles conflicts between individual divisions of the repair station? In addition you need to make a statement that the repair station will provide enough qualified supervisory and employee personnel to ensure that all work performed is in accordance with Part 43.



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Make reference here to your list or roster of management, supervisory, repairmen, and personnel who can approve an article for return to service. Identify where each of the lists are located. Again, make sure this list matches the organizational chart (ref: §145.151(b)).

Describe how the repair station will determine the abilities of its noncertificated employees that perform maintenance functions. Briefly describe how this determination will be made based on training, knowledge, experience, or practical tests. List the name (s) of those responsible to make this determination (ref: §145.151).

(1) Supervisory personnel requirements: If the repair station is located within the United States, include a statement that each supervisor will be certificated under Part 65. State that each supervisor must be thoroughly trained in, or familiar with the work to be performed, and responsible to oversee the work performed by any individuals who are unfamiliar with the work to be performed (ref: §145.153 (b)).

(2) Inspection personnel requirements: Include a statement that the inspection personnel "understand the applicable regulations of the FAR, and are familiar with methods, techniques, and practices to determine the airworthiness condition of the article that is being inspected" (ref: §145.155).

(3) Supervisory, inspection personnel, and repairmen are required to read, write, and understand English. You might want all of them to take an English skills test. For example, have applicants read a portion of a maintenance manual, and then ask them to write, in their own words in English, what the manual wanted them to do, then explain the procedure in English orally. The person responsible for this requirement must be identified (ref: §145.153, §145.155, §145.157).

(4) This part of the manual should describe how the repair station will select, train, and ensure that each repairman meets the eligibility requirements of §65.101 (ref: §145.159).

(5) If your repair station works on air carrier aircraft or components, put your drug testing requirements here.

Editor's Note: The March issue of AMT will include Part Two of Bill O'Brien's "Leaky Boat" discussing the new Part 145 manual requirements.

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